

# TETRA TECH NUS, INC.

55 Jonspin Road • Wilmington, MA 01887-1020 Tel 978 658.7899 • Fax 978.658.7870 • www.tetratech.com

C-NAVY-12-06-2263W

December 7, 2006

Project Number G00065

Ms. Kymberlee Keckler Remedial Project Manager USEPA Region I 1 Congress Street, Suite 1100 Boston, Massachusetts 02114-2023

Mr. Paul Kulpa, Project Manager
Office of Waste Management
Rhode Island Department of Environmental Management
235 Promenade St.
Providence, Rhode Island 02908-5767

Reference:

CLEAN Contract No. N62472-03-D-0057

Contract Task Order No. 35

Subject<sup>2</sup>

Site 17, Gould Island, Building 32

NAVSTA Newport

Dear Ms. Keckler and Mr. Kulpa:

As requested by Mr. James Colter, US Navy Mid-Atlantic Division, Attachment A to this letter presents the Navy's responses to RIDEM comments on the Draft Final Remedial Investigation Report for the site referenced above. These comments were received from RIDEM dated November 24, 2006. Based on an Electronic Mail from K. Keckler dated November 16, 2006, no further comments are anticipated from the USEPA.

The comments as submitted by RIDEM incorrectly reference the comment numbers in the previous letter and left out Navy responses to the original comments. For this response summary, these errors and omissions have been corrected.

Based on these responses, the subject report will be revised and submitted as a final. We are currently scheduled to hold a scoping meeting for the Phase 2 Remedial Investigation and Baseline Ecological Risk Assessment on January 18, 2007.

In accordance with the task order, copies of this material have been provided to the persons on the distribution list below for their information. If you have any questions regarding this material, please do not hesitate to contact me.

Very truly yours,

Stephen St. Parker, LSP Project Manager

SSP/rp

Enclosure

c: A. Blake, SPAWAR (w/ encl.)

J. Colter, NAVFAC (w/encl.)

C. Mueller, NAVSTA (w/encl.)

Newport RAB c/o C. Mueller, NAVSTA (w/encl.)

J. Stump, Gannett Fleming (w/encl.)

J. Trepanowski/G. Glenn, TtNUS (w/encl.)

P. White, CH2M HILL

File G00065-3.2 (w/o encl.) File G00065-8.0 (w/encl.)

3710

# Attachment A Response to Comments From RIDEM Draft Final Remedial Investigation Report, Site 17, Gould Island Comments Dated 11/24/06

#### General Comment

As revealed in the previous correspondence and in discussions on the site the primary focus of the comments was the nature and extent of contamination and corresponding data evaluation and application. The Navy has agreed to provide additional figures depicting the nature and extent of contamination for each area of concern at the site. These figures will be provided after the completion of the Phase I Remedial Investigation Report and prior to the development of the Phase II Remedial Investigation Work Plan. This approach is acceptable to the Office of Waste Management, and therefore the attached comments are limited in nature.

Response: The comment is noted, the maps are in preparation, and will be submitted shortly.

# 17. Section 4.1, Nature and Extent of Contamination, Soil. Page 4-4, Whole Section (comment 6/30/06)

This section of the report should include a brief discussion of the background sample location. The discussion should note that a review of the analytical results for the back ground soil sample reveals that the concentration of certain contaminants exceed that of those found in some of the onsite samples. The island was heavily developed which created logistical problems in selecting a background sampling station. Further the source of contamination at the background sample location is not known. Finally, the report should note whether the observed concentrations of contaminates exceed any criteria. Similar discussions should be included for the other background sampling media.

### Response 8/22/06:

Please refer to the response to Comment 16. A discussion of background sample stations will be added. The Navy does not concur with the implication in the comment that the background sample stations are contaminated, although it is recognized that the level of development and soil disturbance on the island limits available background soil. Therefore the data from the basewide background soil investigation will likely be utilized in the future to evaluate soil data at the site.

#### RIDEM Evaluation of Response (11/24/06)

The Navy has substantially addressed the comment except for the issue that the concentration found in the background sample exceeded site samples for a number of constituents. The Office of Waste Management recognizes that issues pertaining to the adequacy of this background sample will not be addressed in the Phase I document and that additional information and /or evaluations will be available or performed at a later date.

#### Final Response:

The comment is noted. The Phase 2 RI will be scoped at a meeting scheduled for January 18, 2007. The Navy anticipates all requests for additional information relative to the site at that time.

# 27. Section 6.2.0, Data Evaluation, Page 6.4, 1 st Paragraph. (Comment 6/30/06)

The report notes that the water from test pit 02 was not included in the risk assessment as it represents hydrant water, which was used to flush out the pipe. If it is the Navy's contention that the hydrant water was contaminated prior to being used to flush out the pipe, this proposal is acceptable. Otherwise, this observed contamination was from the pipe itself and as such represented a risk and must be included in the assessment.

## Resp nse 8/22/06:

Neither the water used to flush the pipe, nor the contents of the pipe, represents an environmental medium, available for exposure since they were captured, containerized and removed from the site. Therefore they are not included in the risk assessment. Following flushing of the pipe, both ends of the pipe were sealed with concrete. This will be clarified in the appropriate section of the report.

## RIDEM Evaluation of Response (11/24/06)

The intent of the comment was to alert the Navy to the fact that these pipes represented a release point and barring information from soil or groundwater samples collected at this point the flush water should be included in the assessment

### Final response:

The Navy concurs that the pipe was once a release point to the subtidal area at the site. However, the Navy maintains that the flush water does not represent an environmental medium. However, in an effort to not stall progress, the exposure point concentrations for groundwater will be recalculated using the data as requested. The appropriate tables will be revised for human health risk assessment in the final report. The conclusion that the risk to groundwater exposure is above the target levels will not change.

# 31. Section 6.2.1.1 Surface Soils COPC, Page 6.11, 3 rd Paragraph. (comment dated 6/30/06)

The report notes that soil under concrete pavement will not be used in the surface soil COPC. In the past the Navy has indicated that they intend to remove all concrete and pavement from the site. To date they have removed a large amount of asphalt and concrete roadways, which surrounded the site, even though the removal of these roadways was not designed to meet any objective. As such, soil beneath concrete and pavement must be included in the assessment if contaminants are found in these locations.

## Response 8/22/06:

The soils currently located beneath pavement are included in the dataset for "subsurface" soils exposures (0-10 feet bgs) used in the evaluations of future industrial workers and construction workers.

Surface soils were evaluated in the recreational and trespasser scenarios and the current industrial worker scenario. The current/future recreational and trespasser scenarios and the current worker scenario being evaluated in the Gould Island HHRA assume the site remains in its current condition. The Navy currently owns the site and has no current plans to remove existing pavement or sell the property, although it was considered to be removed during the building demolition. Since that opportunity has passed, there is no longer a plan to do so. Previous removal of pavement and roadways was performed in response to the presence of PCB contamination as described in Appendix A of the report.

# RIDEM Evaluation of Response (11/24/06)

The Navy has stated that they do not intend to remove any more concrete from the site and accordingly this soil will not be available as a direct surface soil (in essence the concrete is being considered a cap). Capping, excavation or other remedial alternatives are typically discussed in the Feasibility Study. However, the Navy's proposed solution may stand in the Phase I Remedial Investigation Report with the understanding that the alternative remedial actions will be evaluated for these soils in the Feasibility Study for the site.

#### **Final Response:**

The comment is noted. The comment is correct that the remedial action alternatives evaluated in the FS steps will be considered for all the areas and all soil. No change will be made to the RI report on this matter.

# 50 Section 7.6.1, Terrestrial Plants and Invertebrates, Page 7-14, Last Paragraph (Comment 6/30/06)

The report notes that the concentrations of contaminants exceed terrestrial plant benchmarks However, since stress vegetation was not observed, these exceedances were not considered applicable and they were removed from the baseline ERA. If the sole criterion for determining whether a stressor has been applied to the plant community were the presence of stress vegetation, one would never compare soil contaminant concentrations to criteria, unless stress vegetation was observed. Further, it is well known that certain opportunistic species or resistant species, (animal or plant) will exploit polluted environments. Therefore, the mere fact that some sort of vegetations is present and/or thriving at a particular location cannot be used to eliminate contaminants from the ERA. As such these statements must be removed from the report and all exceedances must be retained.

### Response 8/22/06:

The lack of stressed vegetation was only one line of evidence used to eliminate SVOCs as COPCs from the ERA. The primary reason for their elimination is that any impacts would be limited to a small area at the site so it does not warrant proceeding to a BERA for those chemicals.

#### Evaluation of Response (11/24/06)

The focus of this comments was to identify hot spots at the site which would reflect an impact to either the plants at the location or to higher trophic levels either via an acute exposure or through exposures to sensitive individuals in the populations As an illustration, the site is used as a rookery and as such, fledgling birds which are more sensitive and are more sedentary might adversely be affected by these hot spots.

#### **Final Response:**

The screening values used in Steps 1 and 2 of the Screening level ERA consider the whole life span of the receptors, including the nesting stages. Additionally, the screening of soil data against terrestrial plant benchmarks is conducted separately from screening for effects to birds. Effects to wildlife are addressed in Section 7.6.3 as noted under the RIDEM comment 58, below.

The risk assessment did not conclude that there were no risks to plants or invertebrates, only that the site-related SVOCs that were detected at concentrations that may potentially impact plants and/or invertebrates are limited to a small area at the site. Even if there were slight impacts to plants and/or invertebrates, the impacts from these small areas are not great enough to warrant retaining SVOCs for further evaluation in a baseline ERA. The lack of stressed vegetation was only one line of evidence used to eliminate SVOCs as COPCs from the ERA, as discussed in the initial response 8/22/06 (above).

The screening process used is consistent with EPA and Navy policy on ecological risk assessment, and no changes to the report will be made at this time. However, further discussions may be appropriate if RIDEM does not feel this endpoint is adequately addressed. It is the Navy's hope that any outstanding issues on the ecological risk are brought up at the BERA scoping session scheduled for January 18, 2007 so that they can be adequately addressed in the Phase 2.

# 58.Section 7.6.3, Mammals and Birds Page 7-19, Whole Section (Comment 6/30/06)

The report proposes eliminating a number of chemicals of concern due to the fact that EEQ were not exceeded for the less conservative approach. These chemicals must be retained as it serves to identify potential hot spots. Please modify the report accordingly.

#### Response 8/22/06:

Mammals and birds to not feed and obtain all of their food from only one small location at a site, which happens to be the most contaminated area at a site. As indicated in the USEPA <u>Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments. Interim Final, at Step 3, the conservative exposure assumptions that were used in Steps 1 and 2 should be reviewed to consider how the EEQs would change if more realistic assumptions were used instead. Average chemical concentrations at a site are used in the less conservative food chain model, because they represent more realistic exposure point concentrations versus maximum concentrations. Therefore, the Navy believes that it is appropriate to eliminate chemicals as COPCs if their EEQs are less than 1.0 using the less conservative exposure assumptions.</u>

Evaluation of Response (11/24/06)

The focus of this comment was to identify hot spots at the site, which would reflect an acute or chronic impact. Especially in light of the fact that the site is used as a rookery.

#### **Final Response:**

The screening values used in Steps 1 and 2 of the Screening level ERA consider the whole life span of the receptors, including the nesting stages. As discussed in the initial response 8/22/06 (above), the approach of using less conservative exposure assumptions in the Step 3a refinement is presented in USEPA ERA guidance. The less conservative assumptions include using average exposure concentrations, versus maximum detected concentrations and also using less conservative exposure assumptions. "Hot spots" at a site, if present, do not reflect acute impacts because the toxicity data (i.e., NOAELS) are based on chronic effects. "Hot spots" could reflect an increased exposure, provided that animals are only exposed to chemicals in the "hot spot." However, based on the distribution of the data, there do not appear to be "hot spots" at the site for chemicals that were causing significant risks in the conservative food chain models.

The screening process used is consistent with EPA and Navy policy on ecological risk assessment, and no changes to the report will be made. However, further discussions may be appropriate if RIDEM does not feel this endpoint is adequately addressed. It is the Navy's hope that any outstanding issues on the ecological risk are brought up at the BERA scoping session scheduled for January 18, 2007 so that they can be adequately addressed in the Phase 2.